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Lectotypification of *Crepidotus variabilis* var. *subsphaerosporus*

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Abstract — An original watercolour painting by J.E. Lange is designated as the lectotype of *Crepidotus variabilis* var. *subsphaerosporus*. This painting was cited in two descriptions published invalidly by Lange prior to his validation of the name; it therefore constitutes part of the original material on which he based his description. As a lectotype, it supersedes the neotype previously designated by Senn-Irlet, which is here designated as epitype.

Key words — Afbildninger af Danmarks Agaricaceer, *Basidiomycota*, *Crepidotus cesatii* var. *subsphaerosporus*, *Crepidotus kubickae*, Flora Agaricina Danica

Introduction

The name *Crepidotus variabilis* var. *subsphaerosporus* was first proposed by J.E. Lange (1938: 52, as '*subsphaerospora*') as a nomen non rite publicatum, lacking a Latin description (McNeill et al. 2006: Art. 36.1). No type specimen was designated; according to M. Lange (1969: 131), J.E. Lange "never tried to make up a set of herbarium specimens." However, an illustration was cited (as "D.A. pl. 533"), together with details of collection locality, habitat, and date. The abbreviation "D.A." refers to the extensive series of watercolours painted by J.E. Lange during the years 1893–1910 and compiled under the title "Afbildninger af Danmarks Agaricaceer" (J.E. Lange 1914: 1; M. Lange 1969: 122–123). The original paintings (initially held by J.E. Lange) are now conserved in the Herbarium, Natural History Museum of Denmark, University of Copenhagen (C), and are reproduced on the Flora Agaricina Danica website (http://130.225.211.158/agaricina/flagar-search.htm; H. Knudsen, pers. comm.). Subsequently, J.E. Lange painted a duplicate set for the Museum on better quality paper (M. Lange 1969: 123); this set is now held in the private collection of his granddaughter, Dr. Lene Lange, Aalborg University (H. Knudsen, pers. comm.).

J.E. Lange (1939: 46, pl. 133 fig. E) republished the description with minor changes accompanied by a printed reproduction of the original painting (with some repositioning of component elements), but the name remained invalid for lack of a Latin description.

J.E. Lange (1940: IV) finally validated the name in a set of Latin diagnoses of names invalidly published in "Flora Agaricina Danica." Although there is no direct reference to the earlier publication pages, the trinomial is marked with an asterisk, indicating that the name had originally been published in "Studies in the Agarics of Denmark" during the period "1935–40" (J.E. Lange 1940: II), i.e., in the series of papers that included J.E. Lange (1938).

When Senn-Irlet (1995: 53) recombined the name as *Crepidotus cesatii* var. *subsphaerosporus* (J.E. Lange) Senn-Irlet, she designated a Swiss collection as neotype. However, this designation ignored the availability of original material (the watercolour painting) that should have been selected as lectotype (McNeill et al. 2006: Art. 9.10, 9.11).

Here we designate the original watercolour painting as lectotype, and the superseded Swiss "neotype" as epitype.

Taxonomy and typification

The name *Crepidotus variabilis* var. *subsphaerosporus* has priority at variety rank (e.g., as treated in Senn-Irlet 1995). Ripková (2009: 272) summarized the nomenclatural history of the taxon under C*repidotus kubickae*, the synonym that has priority at species rank. Two widely cited purported recombinations of J.E. Lange's basionym at species rank were not validly published (McNeill et al. 2006: Art. 33.4): "*Crepidotus subsphaerosporus*" (J.E. Lange) Kühner & Romagn. (Kühner & Romagnesi 1953: 76) lacked a full and direct basionym reference, and "*Crepidotus subsphaerosporus*" (J.E. Lange) Kühner & Romagn. ex Hesler & A.H. Sm. (Hesler & Smith 1965: 121) gave a full and direct reference to the 1938 nomen non rite publicatum, a non-correctable nomenclatural error (McNeill et al. 2006: Art. 33.7).

J.E. Lange preserved no herbarium specimens other than an occasional spore print. There are no J.E. Lange collections or spore prints of *C. variabilis* var. *subsphaerosporus* at C; the watercolour painting, conserved at C (viewable on http://130.225.211.158/agaricina/flagar-search.htm under "*Crepidotus subsphaerosporus*"), is apparently the only extant original material. (J.E. Lange's duplicate painting is extant, but it is debatable whether this can be considered to be "original material.") The original painting is on a 26.5 × 17.7 cm sheet of thick, cardboard-like, aquarelle paper, which has now yellowed considerably. The images comprise a drawing of two basidiospores, a painted representation of the spore print colour (easily overlooked because of its resemblance to adjacent blotches of foxing discoloration), and three habit paintings of the basidiomata.

(The three habit paintings and the basidiospore drawing, but not the spore print colour representation, are also reproduced in J.E. Lange 1939: pl. 133 fig. E.) The original painting bears various handwritten ink and pencil annotations in Danish: in the upper right corner "Tavle 533"; below the basidiospore drawing "sp x 1000"; and along the lower margin "*Crepidotus sessilis* (Bull.) Schroet. f. *subsphaerospora*. Sporestøv blegt okkerbrunt. Sp sphærisk-ellips, 6 x 4 ¾. Hæsbjerg, på pinde af eg o.a. løvtræer. Okt. 1901." Hæsbjerg is an old spelling for the modern Hesbjerg, the name of a number of localities on Funen, the Danish island where J.E. Lange lived and did most of his collecting; the most likely collection locality is at 55°22′N 10°13′E, the only forested Hesbjerg on Funen (H. Knudsen, pers. comm.).

We propose the original painting as lectotype of *C. variabilis* var. *subsphaerosporus*. We also propose Senn-Irlet's superseded "neotype" as epitype, providing micromorphological data to supplement the macromorphology illustrated in the lectotype.

Crepidotus kubickae Pilát, Stud. Bot. Čechoslov. 10: 150, 1949, as '*Kubičkae*'.

Type (Pilát 1949, Senn-Irlet 1992, Ripková 2009): CZECH REPUBLIC. Central Bohemia: "Poříčko nad Sázavou, ad terram inter muscis, 29.V.1949, legit J. Kubička, det. Pilát, Typus." (PRM 665190, **holotype**).

= ***Crepidotus variabilis* var. *subsphaerosporus*** J.E. Lange, Fl. Agaric Danic. 5: IV, 1940.

Types: DENMARK. Funen: Hesbjerg, "*Crepidotus sessilis* (Bull.) Schroet. f. *subsphaerospora*. Sporeprint pale ochre brown. Sp sphaerical-ellipsoid, 6 × 4¾. Hæsbjerg, on sticks of *Quercus* and other deciduous trees. Oct. 1901." [in Danish]. (C, Danmarks Agaricaceer Tavle 533, original watercolour painting by J.E. Lange, **lectotype designated here**). SWITZERLAND. Bern: Röthenbach, Schineggschwand am Schallberg, alt. 1000 m, *Abieti-Fagetum*, on fallen *Picea* twigs, 11 Oct. 1989, Senn-Irlet 89/240 (G, **epitype designated here**).

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